Claims

What is claimed is:

5   1. A method for presenting a double byte character on
         a display device of an AV decoding/playing/copying
         system to update a frame of the display device, the
         method comprising:
              (a) storing a double byte character set (DBCS)
10   file and a video source file in a storage
                    medium;
              (b) accessing the file system information of the
                   storage medium and calculating the length of
                   a file name of the video source file;
15   (c) accessing the required double byte character
                   from the DBCS file; and
              (d) updating the original information of an
                   on-screen display (OSD) to update a frame of
                   the display device according to the received
20   double byte character.

     2. The method of claim 1 wherein the storage medium
         is an optical disc or a memory card.

25   3. The method of claim 1 wherein step (c) further
         comprises:
              (c1) calculating a physical location of the
                   required double byte character in the
                   storage medium; and
30   (c2) capturing the required double byte
                   character from the physical location.

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4. The method of claim 3 wherein the DBCS file is BIG5 internal code system, gbk internal code system, or Unicode Korean internal code system, and step (c1) is achieved by the following steps:

5   calculating high and low byte differences of the internal code of the required double byte character and the beginning code of the file of DBCS; and

subtracting a value of quantities of blank code
10   locations from the high and low byte differences, and calculating the physical location of the required double byte character in the storage medium by adding the number of font bytes to the number of bytes
15   of the double byte character.

5. The method of claim 3 wherein the file of a double byte character set is Shift-JIS internal code system, and step (c1) is achieved by the following steps:
20   if the internal code of the required double byte character is located within a first section of the internal code system, calculating the high byte difference of the internal code of the required double byte character and the
25   beginning internal code of the first section, calculating the low byte difference of the internal code of the required double byte character and the beginning internal code of the first section, subtracting a value of
30   quantities of blank code locations from the high and low byte differences, and calculating the physical location of the

required double byte character in the storage
medium by adding the number of font bytes to
the number of bytes of the double byte
character;

5   if the internal code of the required double byte
character is located within a second section
of the internal code system, calculating the
high byte difference of the internal code of
the required double byte character and the
10   beginning internal code of the second section,
calculating the low byte difference of the
internal code of the required double byte
character and the beginning internal code of
the second section, subtracting a value of
15   quantities of blank code locations and the
number of bytes of codes in the first section
from the high and low byte differences, and
calculating the physical location of the
required double byte character in the storage
20   medium by adding the number of font bytes to
the number of bytes of the double byte
character; and

if the internal code of the required double byte
character is located within a third section
25   of the internal code system, calculating the
high byte difference of the internal code of
the required double byte character and the
beginning internal code of the third section,
calculating the low byte difference of the
30   internal code of the required double byte
character and the beginning internal code of
the third section, subtracting a value of

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quantities of blank code locations and the
numbers of bytes of codes in the first and
second sections from the high and low byte
differences, and calculating the physical

5   location of the required double byte
character in the storage medium by adding the
number of font bytes to the number of bytes
of the double byte character;

10 6. The method of claim 1 wherein the video source file
is an MP3 (MPEG layer 3) file.

7. An AV decoding/playing/copying system that
presents a double byte character on a display device
15   by an on-screen display function to update a frame
of the display device, the AV
decoding/playing/copying system comprising:
        a storage medium for storing a video source file
            and at least one type of double byte character
20   set file;
        an on-screen display (OSD) buffer memory for
            storing OSD information;
        a memory;
        a processor electrically connected to the memory,
25   the process capable of accessing a file system
            of the storage medium and temporarily storing
            an internal code of a file name in the memory;
            and
        an on-screen display unit electrically connected
30   to the OSD buffer memory, the on-screen
            display unit capable of capturing a required
            double byte character from the double byte

character set file through the processor according to the internal code of the file name temporarily stored in the memory, and presenting the required double byte character on the display device according to the OSD information to update the frame of the display device.

8. The AV decoding/playing/copying system of claim 7 wherein the processor further including a file separation module for separating the double byte character set file from the file system of the storage medium in order to access the double byte character.

9. The AV decoding/playing/copying system of claim 7 wherein the processor further including a character calculation module for calculating location offsets of each character corresponding to internal codes according to a beginning location and an end location defined by the double byte character set file to obtain the physical location of each character.

10. The AV decoding/playing/copying system of claim 7 wherein the storage medium is an optical disc or a memory card.

11. The AV decoding/playing/copying system of claim 7 further comprising a detector module for detecting the locations of the video source file and the double byte character set file and for

switching the locations of the video source file
and the double byte character set file when the
video source file and the double byte character
set file stored in several types of storage media

5   are obtained.

12.   The AV decoding/playing/copying system of claim
      7 wherein the video source file is an MP3 file.